

$$\log x + \log 2 = 1$$

$$\log x + \log 2 = \log 2x$$

$$\log_{10} 2x = 1$$

$$(10)^1 = 2x \Rightarrow x = \frac{10}{2} = 5$$

$$\log x + \log 2 = 1$$

$$\log x + \log 2 = \log 10$$

$$\log 2x = \log 10$$

$$x = 5$$

$$\log x + \log 2 = 1$$

$$\log x = 1 - \log 2$$

$$\log x = .6989$$

$$x = 5$$

$$10^{(1 - \log 2)} = x$$

$$10^{\boxed{.6989}} = x$$

$$\ln(x+1) = \ln(3x+1) - \ln x$$

$$\ln x = \ln(3x+1) - \ln(x+1)$$

$$\ln x = \ln \left(\frac{3x+1}{x+1} \right)$$

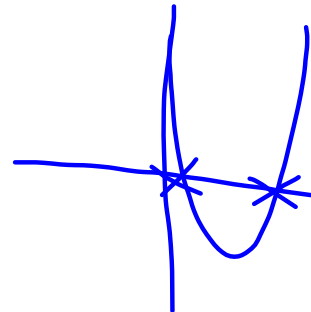
$$\frac{x}{1} = \frac{3x+1}{x+1}$$

$$x(x+1) = 3x+1$$

$$x^2 + x = 3x+1$$

$$x^2 - 2x - 1 = 0$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$



$$\ln(x+1) = \ln(3x+1) - \ln x$$

p 402

17, 18, 21, 29, 31

$$\ln(x+1) = \ln(3x+1) - \ln x$$